

REMARKS

Claims 1, 5-11 and 15-21 are pending in the application.

Claims 1, 5-11 and 15-21 are rejected.

Claims 1, 11, 15 and 21 are amended.

Reconsideration and allowance of claims 1, 5-11 and 15-21 is respectfully requested in view of the following:

Responses to Rejections to Claims – 35 U.S.C. §112

Claims 11 and 15-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Claims 11, 15 and 21 have been amended to overcome this rejection. Accordingly, Applicants respectfully request that this rejection be withdrawn.

Responses to Rejections to Claims – 35 U.S.C. §103

Claims 1-6, 11-17 and 21 are listed in the Office Action as rejected under 35 U.S.C. 103(a) as being unpatentable over Agarwal et al (U.S. Patent No. 6,007,228) (Agarwal hereinafter) and the Audio Codec '97 Component Specification, Revision 2.2 (AC97 hereinafter). However, claims 2-4 and 12-14 were previously cancelled. Because of this, Applicants respectfully assume that the rejection is intended to apply to claims 1, 5-6, 11, 15-17 and 21. Claims 7-10 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Agarwal et al (U.S. Patent No. 6,007,228) (Agarwal hereinafter) and the Audio Codec '97 Component Specification, Revision 2.2 (AC97 hereinafter) as applied to claim 6 above, and further in view of Markow et al (U.S. Patent No. 6,359,994) (Markow hereinafter). These rejections are not applicable to the amended claims.

As the PTO recognizes in MPEP §2142:

The Examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the Examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness.

The USPTO clearly cannot establish a *prima facie* case of obviousness in connection with the amended claims for the following reasons:

35 U.S.C. §103(a) provides that:

[a] patent may not be obtained...if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.... (emphasis added)

Thus, when evaluating a claim for determining obviousness, all limitations of the claim must be evaluation. However, the references, alone, or in any combination, do not teach all limitations of the rejected claims.

Rejection of Claims Based on Agarwal and AC97

Claims 1, 5-6, 11, 15-17 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Agarwal and the AC97. Applicants respectfully traverse this rejection on the grounds that the combination of references fails to teach all limitations, and therefore fails to present a *prima facie* case of obviousness.

Claim 1 includes, in part, "a first multi-pin docking connector in a portable portion, wherein only one audio pin of the first multi-pin docking connector is coupled to the audio coder and decoder via the unidirectional S/PDIF digital audio output" and "a second multi-pin docking connector in a docking station, wherein only one audio pin of the second multi-pin docking connector is coupled to the only one audio pin of the first multi-pin docking connector." (emphasis added).

According to the Office Action, "there are no limitations in the claims which prohibit the docking connector from having further single pins, as each individual pin is, by it's very nature, a single pin." p. 10, lines 13-14. Applicants respectfully note that claim 1 has been amended to claim "only one audio pin of the first multi-pin docking connector" and "only one audio pin of the second multi-pin docking connector." (emphasis added). Accordingly, the amendments distinguish the invention over the cited art.

Agarwal does not teach a docking interface with two docking connectors each using only one audio pin. Agarwal teaches a docking interface having two docking connectors each requiring 5 audio pins to transmit audio signals. According to Agarwal, a serial output is "transmitted in the 5-wire external audio link 58" which connects "master mixer 54 to external

controller 86" through the docking interface. Fig. 4; col. 6, lines 48-49; col. 11, lines 23-26; col. 9, lines 65-66.

As discussed above, Agarwal fails to teach key limitations of independent claim 1. AC97 appears to teach nothing that overcomes the deficiencies of Agarwal, and the Office Action has made no argument to the contrary. For at least this reason, it is impossible to render the subject matter of the claims as a whole obvious based on a single reference or any combination of the references, and the above explicit terms of the statute cannot be met with respect to claim 1. Independent claims 11 and 21 are patentable at least for similar reasons as described for representative claim 1. As a result, the USPTO's burden of factually supporting a *prima facie* case of obviousness clearly cannot be met with respect to claims 1, 11 and 21, and to the claims which depend therefrom.

Therefore, it is impossible to render the subject matter of the claims as a whole obvious based on a single reference or any combination of the references, and the above explicit terms of the statute cannot be met. As a result, the USPTO's burden of factually supporting a *prima facie* case of obviousness clearly cannot be met with respect to the claims, and a rejection under 35 U.S.C. §103(a) is not applicable.

Rejection of Claims Based on Agarwal, AC97 and Markow

Claims 7-10 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Agarwal and AC97 in further view of Markow. Applicants respectfully traverse this rejection on the grounds that the combination of references fails to teach all limitations of the rejected claims, and therefore fails to present a *prima facie* case of obviousness.

As discussed above, Agarwal and AC97 fail to teach all limitations of claims 1 and 11, from which claims 7-10 and 18-20 depend. Markow appears to teach nothing that overcomes the deficiencies noted for the combination of Agarwal and AC97, and the Office Action has made no argument to the contrary. Applicants thus submit that the references are not properly combinable with respect to any rejected claim. Accordingly, Applicants respectfully request withdrawal of this rejection.

Therefore, it is impossible to render the subject matter of the claims as a whole obvious based on a single reference or any combination of the references, and the above explicit terms of the statute cannot be met. As a result, the USPTO's burden of factually supporting a *prima facie* case of obviousness clearly cannot be met with respect to the claims, and a rejection under 35 U.S.C. §103(a) is not applicable.

References are Not Properly Combinable

There is still another compelling, and mutually exclusive, reason why the references cannot be combined and applied to reject the claims under 35 U.S.C. §103(a).

The PTO also provides in MPEP §2142:

[T]he Examiner must step backward in time and into the shoes worn by the hypothetical "person of ordinary skill in the art" when the invention was unknown and just before it was made. In view of all factual information, the Examiner must then make a determination whether the claimed invention "as a whole" would have been obvious at that time to that person. ...[I]mpermissible hindsight must be avoided and the legal conclusion must be reached on the basis of the facts gleaned from the prior art.

Recently, the Supreme Court ruled that the "teaching, suggestion, or motivation (TSM) test" for determining obviousness still applies, but should be used in a more "expansive and flexible" manner. *KSR Int'l. Co. v. Teleflex Inc.*, 550 U.S. ___, 11 (2007). The Court stated that "a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art. Although common sense directs one to look with care at a patent application that claims as innovation the combination of two known devices according to their established functions, it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does. This is so because inventions in most, if not all, instances rely upon building blocks long since uncovered, and claimed discoveries almost of necessity will be combinations of what, in some sense, is already known." *Id.* at 14-15, emphasis added.

In the present case, the Examiner has not expressed a reason why a person of ordinary skill in the art would combine Agarwal and AC97 as required by independent claim 1. Agarwal does not disclose a first multi-pin docking connector in a portable portion, wherein only one audio pin of the first multi-pin docking connector is coupled to an audio coder and decoder via the unidirectional S/PDIF digital audio output, and a second multi-pin docking connector in a docking station, wherein only one audio pin of the second multi-pin docking connector is coupled to the only one audio pin of the first multi-pin docking connector. AC97 does not disclose a first multi-pin docking connector in a portable portion, wherein only one audio pin of the first multi-pin docking connector is coupled to an audio coder and decoder via the unidirectional S/PDIF digital audio output, and a second multi-pin docking connector in a docking station, wherein only one audio pin of the second multi-pin docking connector is

coupled to the only one audio pin of the first multi-pin docking connector. If Agarwal is combined with AC97, as suggested by the Office Action, the result would not be as is required by the claims. The claims require a first multi-pin docking connector in a portable portion, wherein only one audio pin of the first multi-pin docking connector is coupled to an audio coder and decoder via the unidirectional S/PDIF digital audio output, and a second multi-pin docking connector in a docking station, wherein only one audio pin of the second multi-pin docking connector is coupled to the only one audio pin of the first multi-pin docking connector.

Furthermore, the Examiner has not expressed a reason why a person of ordinary skill in the art would combine Agarwal and AC97 with Markow as required by independent claim 1. Agarwal and AC97 do not disclose a first multi-pin docking connector in a portable portion, wherein only one audio pin of the first multi-pin docking connector is coupled to an audio coder and decoder via the unidirectional S/PDIF digital audio output, and a second multi-pin docking connector in a docking station, wherein only one audio pin of the second multi-pin docking connector is coupled to the only one audio pin of the first multi-pin docking connector. Markow does not disclose a first multi-pin docking connector in a portable portion, wherein only one audio pin of the first multi-pin docking connector is coupled to an audio coder and decoder via the unidirectional S/PDIF digital audio output, and a second multi-pin docking connector in a docking station, wherein only one audio pin of the second multi-pin docking connector is coupled to the only one audio pin of the first multi-pin docking connector. If Agarwal and AC97 are combined with Markow, as suggested by the Office Action, the result would not be as is required by the claims. The claims require a first multi-pin docking connector in a portable portion, wherein only one audio pin of the first multi-pin docking connector is coupled to an audio coder and decoder via the unidirectional S/PDIF digital audio output, and a second multi-pin docking connector in a docking station, wherein only one audio pin of the second multi-pin docking connector is coupled to the only one audio pin of the first multi-pin docking connector.

Additionally, the Office Action states that "one of ordinary skill in the art, when constructing the device of Agarwal would have been motivated to use S/PDIF." page 11, lines 5-8. Applicants respectfully disagree. AC97 teaches away from the claimed subject matter. Although AC97 acknowledges that S/PDIF is an established consumer electronics digital audio interface that is supported by AC97, it states that "Intel does not advocate the use of S/PDIF out for the attachment of speakers." p. 64. AC97 further goes on to say that "S/PDIF is not as user friendly as USB" because it "is non-PnP, unidirectional, low bandwidth, and carries data only (i.e. you can't tell if S/PDIF equipment is connected or operational, nor can you control it).

S/PDIF is also complicated by incompatible physical connectors.” p. 64. Accordingly, it would not have been obvious to incorporate an S/PDIF output into a docking station and there is simply no basis in the art for combining the references to support a 35 U.S.C. §103(a) rejection of the claims.

Furthermore, the references are not properly combinable as their intended functions would be destroyed. Claim 1 includes, “an audio coder and decoder coupled to the glue logic and including a unidirectional Sony-Philips Digital Interface (S/PDIF) digital audio output.” Agarwal does not teach a unidirectional S/PDIF digital audio output. The digital audio connections in Agarwal are bidirectional. Fig. 4. Therefore, audio signals must go through a master mixer in order to be sent and received. Fig. 4. According to Agarwal, “[r]ather than communicate directly with each other, the internal and external audio controllers must send and receive digital audio signals through master mixer 54.” col. 6, lines 61-63. By using the master mixer to route signals, Agarwal requires additional hardware and software than what is currently claimed. The master mixer is hardware, and it requires software to properly route signals.

AC97 does teach an S/PDIF output that is supported by AC97. However, Agarwal and AC97 are not properly combinable because including the S/PDIF of AC97 in the docking station setup of Agarwal would destroy the intended function of the invention in Agarwal. According to the Office Action, “Agarwal could receive external audio, mix it, and send it back out using unidirectional connections.” page 11, lines 19-20. Applicants respectfully disagree. The master mixer of Agarwal “has bidirectional connections to internal audio link 56 and external audio link 58” and is used to “combine both the external audio from the external microphone, CD, or line input with the FM synthesized music from the internal audio system. The combined audio from master mixer 54 can then be sent back out to external audio controller 86 over external audio link 58 for playback on the external speakers.” col. 10, lines 43-45; col. 12, lines 42-47. If Agarwal used unidirectional connections, it could not receive external audio over audio link 58, mix it, and then send it back out to be played on the external speakers over audio link 58.

For at least these reasons, the USPTO’s burden of factually supporting a *prima facie* case of obviousness clearly cannot be met with respect to claim 1. Independent claims 11 and 21 are patentable at least for similar reasons as described for representative claim 1. Accordingly, Applicants respectfully request withdrawal of this rejection with respect to claims 1, 11 and 21, and to the claims which depend therefrom.

Thus, in the present case it is clear that the USPTO’s combination arises solely from hindsight based on the present disclosure without any reason why a person of ordinary skill in

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the art would combine the references as required by the claims. Therefore, for this mutually exclusive reason, the USPTO's burden of factually supporting a *prima facie* case of obviousness clearly cannot be met with respect to the claims, and the rejection under 35 U.S.C. §103(a) is not applicable.

Therefore, independent claims 1, 11 and 21 and their respective dependent claims are submitted to be allowable.

In view of all of the above, the allowance of claims 1, 5-11 and 15-21 is respectfully requested.

The amended claims are supported by the original application.

The Examiner is invited to call the undersigned at the below-listed telephone number if a telephone conference would expedite or aid the prosecution and examination of this application.

Respectfully submitted,



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Kim Reyes